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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,783	02/11/2004	Hiroshi Asano	011.2-11481-US01	3253
490 7590 01/09/2008 VIDAS, ARRETT & STEINKRAUS, P.A. SUITE 400, 6640 SHADY OAK ROAD EDEN PRAIRIE, MN 55344			EXAMINER TRAN, BINH X	
			ART UNIT 1792	PAPER NUMBER
			MAIL DATE 01/09/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/776,783

Applicant(s)

ASANO ET AL.

Examiner

Binh X. Tran

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-12,17 and 18 is/are pending in the application.
- 4a) Of the above claim(s) 6-12 and 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5, 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Species A (claims 1, 5, 17) in the reply filed on 10-26-2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claim 18 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/26/2007.

Claim Interpretations

3. Claims 1, 5, 17 are composition claims. Applicants disclose the intended of use for the composition for the above claims. According to the MPEP 2111.02, "If the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction." Thus, the examiner will not give any patentable weight on the intended use.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 5, 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Rezolin, LLC "Material Safety Data Sheet"; <http://www.aplusbputty.com/PDF/Copy%20of%20MSDS%209904B.pdf> (evidence by UNEP Publications, "Tetraethylenepentamine").

Respect to claims 1 and 17, Rezonlin LLC discloses a composition consisting of 10-30 % tetraethylene pentamine (Table in page 1; Note 10% read on applicant's range of 3-10%). Rezonlin fails to explicitly disclose that tetraethylene pentamine is dissolved in water. Solubility in water is a property of a material. According to the MPEP, 2112.01, II, "Products of identical chemical composition can not have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present". Further, the evidence by UNEP Publications, "Tetraethylenepentamine", disclose the tetraethylene pentamine is soluble in water (See page 7).

Respect to claim 5, Rezolin does not explicitly disclose the selection ratio between silicon dioxide and polycrystalline silicon number. However, Rezolin composition is identical with applicant's composition. Rezolin composition further has the weight percentage of tetraethylenepentamine within applicant's claimed range (i.e. 10%). Thus, it is inherently that Rezolin composition has the selection ratio of 100 or more.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnes Jr et al. (US 4,743,418).

Respect to claim 1 and 17, Barnes discloses a composition consisting of water and water-soluble amine comprising tetraethylenepentamine (See Table I, example 7-11, 1st stage treatment; or example 1-5, 14, 2nd stage treatment). Claim 1 differs from Barnes by the specific weight percentage of tetraethylenepentamine. It would have been obvious to one having ordinary skill in the art, at the time of invention, to select the proper weight percentage of tetraethylenepentamine in order to accomplish the desired result because it has been held that there is no invention where the difference in

proportions is not critical and was ascertained by routine experimentation because the determination of workable ranges is not considered inventive.

9. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barnes (US 4,743,418) as applied to claims 1, 17 above, and further in view of Lee et al. (US 2003/0216003 A1).

Respect to claim 5, Barnes fails to disclose the selectivity ratio of silicon dioxide to polysilicon is 100 or more. Lee teaches the selectivity of polysilicon to silicon dioxide is 1:50 to 1:300 (Lee's claim 12). Any person having ordinary skill in the art would be able to calculate the selectivity of silicon dioxide to polysilicon in Lee reference equal to 50:1 to 300:1 (i.e. reciprocal value). It would have been obvious to one having ordinary skill in the art, at the time of invention, to select the proper selectivity value in order to accomplish the desired result because it has been held that there is no invention where the difference in proportions is not critical and was ascertained by routine experimentation because the determination of workable ranges is not considered inventive.

Response to Arguments

10. Respect to the previous 35 USC 102 rejection, the applicants argue that Claim 1 has been amended to recite the feature that the content of the water- soluble amine in the polishing composition is 3 to 10% by weight. According to applicants, "Neither Sezi nor Barnes discloses or suggests the feature added by this amendment." This argument is persuasive, thus the examiner withdrawn the previous 35 USC 102 rejection. However, upon further consideration the examiner concludes that it is

obvious to ordinary skill in the art, at the time of invention, to select the proper weight percentage of tetraethylenepentamine in order to accomplish the desired result because it has been held that there is no invention where the difference in proportions is not critical and was ascertained by routine experimentation because the determination of workable ranges is not considered inventive.

Since the applicants amended claim 1 (in the amendment filed on 7/20/2007), the examiner also provide a new ground of rejections as discussed above using the new cited prior art (See Note of Reference Cited).

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh X. Tran whose telephone number is (571) 272-1469. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Binh X. Tran

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